

4.0 EXISTING ENVIRONMENT AND IMPACTS ANALYSIS

INTRODUCTION TO ENVIRONMENTAL ANALYSIS

Section 4.0, Existing Environment and Impacts Analysis, of the Final Environmental Impact Report (EIR) for the Shell Martinez Marine Terminal (Shell Terminal) Lease Consideration Project (Project) examines the potential environmental impacts of the proposed Project and Project alternatives. This section includes analyses of the environmental issue areas listed below:

- 4.1 Operational Safety/Risk of Accidents
- 4.2 Water Quality
- 4.3 Biological Resources
- 4.4 Commercial and Sports Fisheries
- 4.5 Land Use/Recreation
- 4.6 Air Quality
- 4.7 Noise
- 4.8 Vehicular and Rail Transportation
- 4.9 Visual Resources/Light and Glare
- 4.10 Cultural Resources
- 4.11 Geological Resources/Structural Integrity Review
- 4.12 Environmental Justice

Each issue area section provides background information and describes the environmental setting (baseline conditions) to help the reader understand the conditions that would be affected by an impact. In addition, each section describes how an impact is determined to be “significant” or “less than significant.” Finally, the individual sections recommend mitigation measures (MMs) to reduce significant impacts. Throughout Section 4.0, Existing Environment and Impacts Analysis, both impacts and the corresponding mitigation measures are identified by a ~~bold~~ letter-number designation, e.g., Impact BIO-1 and mitigation measure MM BIO-1a.

Based on an initial review and analysis, it is likely that the proposed Project would have a less than significant impact, or no impact, on the environmental issue areas identified below. The primary reasons for these determinations are as follows:

- Air Quality. The current emissions output of Shell Terminal operations is permitted. Because no significant construction projects, nor an increase in throughput, are planned as part of the proposed Project, no adverse impact to air quality as a result of the proposed Project is anticipated.
- Vehicular and Rail Transportation. The proposed Project would not increase vehicular traffic during the lease period. No impacts would occur; ~~and,~~
- Cultural Resources. The Shell Terminal is not eligible to be considered a historic resource and there are no other potential historical resources in the project area, thus there are no impacts. In addition, there are no shipwrecks near the Shell

Terminal; thus, there would be no impacts on cultural resources from standard maintenance dredging.

ASSESSMENT METHODOLOGY

Environmental Baseline

The analysis of each issue area begins with an examination of the existing physical setting (baseline conditions as determined pursuant to section 15125(a) of the State California Environmental Quality Act [CEQA] Guidelines) that may be affected by the proposed Project. The effects of the proposed Project are defined as changes to the environmental setting that are attributable to Project components or operation.

Unless otherwise noted in the specific resource sections which follow, and consistent with State CEQA Guidelines section 15125(a), 2004 is the baseline year used in this EIR. Baseline conditions are defined as the Shell operations existing at the time the Notice of Preparation (NOP) for this EIR was published (July 21, 2004) unless specified otherwise. For example, Shell's combined limit or cap on emissions ["REFEMS" permit], which limits emissions from the Shell Refinery and Terminal, serves as the air quality baseline for this EIR per the Bay Area Air Quality Management District (see Responses to Comments CP-3 and CP-12).

Significance Criteria

Significance criteria are identified for each environmental issue area. The significance criteria serve as a benchmark for determining if a component action will result in a significant adverse environmental impact when evaluated against the baseline. Environmental impact means "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project..."

Impact Analysis

Impacts are classified as:

- **Class I** (significant adverse impact that remains significant after mitigation);
- **Class II** (significant adverse impact that can be eliminated or reduced below an issue's significance criteria);
- **Class III** (adverse impact that does not meet or exceed an issue's significance criteria); or
- **Class IV** (beneficial impact).

A determination will be made, based on the analysis of any impact within each affected environmental issue area and compliance with any recommended mitigation measure(s), of the level of impact remaining in comparison to the pertinent significance criteria.

- If the impact remains significant at or above the significance criteria, it is deemed to be Class I.
- If a “significant adverse impact” is reduced, based on compliance with mitigation, to a level below the pertinent significance criteria, it is determined to no longer have a significant effect on the environment, i.e., to be “less than significant” (Class II).
- If an action creates an adverse impact above the baseline condition, but such impact does not meet or exceed the pertinent significance criteria, it is determined to be adverse, but less than significant (Class III).
- An action that provides an improvement to an environmental issue area in comparison to the baseline information is recognized as a beneficial impact (Class IV).

Formulation of Mitigation Measures and Mitigation Monitoring Program

When significant impacts are identified, feasible mitigation measures are formulated to eliminate or reduce the intensity of the impacts and focus on the protection of sensitive resources. The effectiveness of a mitigation measure is subsequently determined by evaluating the impact remaining after its application. Those impacts meeting or exceeding the impact significance criteria after mitigation are considered residual impacts that remain significant (Class I). Implementation of more than one mitigation measure may be needed to reduce an impact below a level of significance. The mitigation measures recommended in this document are identified in the impact assessment sections and presented in a Mitigation Monitoring Program (MMP). The MMP is provided in Section 6.0, Mitigation Monitoring Program.

If any mitigation measures become incorporated as part of a project's design, they are no longer considered mitigation measures under the CEQA. If they eliminate or reduce a potentially significant impact to a level below the significance criteria, they eliminate the potential for that significant impact since the “measure” is now a component of the action. Such measures incorporated into the project design have the same status as any “applicant proposed measures.” The CSLC’s practice is to include all measures to eliminate or reduce the environmental impacts of a proposed project, whether applicant proposed or recommended mitigation in the MMP.

Impacts of Alternatives

Section 3.0, Alternatives and Cumulative Projects, provides a list, and a description, and a map that identify of the alternatives to the proposed Project and a description of the cumulative projects-baseline. Each issue area in Section 4.0, Existing Environment and Impacts Analysis, presents the impact analysis for each alternative scenario. A summary of the collective impacts of each alternative in comparison with the proposed Project is also included within the Executive Summary.

Cumulative Projects Impacts Analysis

Section 3.0, Alternatives and Cumulative Projects, provides a description of the cumulative projects that define the cumulative environment. Each issue area in Section 4.0, Existing Environment and Impacts, presents the cumulative impacts, the focus of which is to identify the potential impacts of the Project that might not be significant when considered alone, but that might contribute to a significant impact when viewed in conjunction with the other projects.